I claim:

1. A chemical composition comprising a peptide derived from the E2, E6, or E7 early coding region of human papillomavirus 16 and 18 that is soluble in aqueous solution and further has one or more of the properties of a lysine or cysteine residue near the amino terminus, a relative paucity of tryptophan, methionine, and cysteine residues, and a relative abundance of glycine and asparagine residues.

2. A chemical composition according to claim 1, wherein the peptide is selected from the group consisting of:

Asp Ile Cys Asn Thr Met His Tyr Thr Asn Trp Thr His Ile Tyr Ile Cys Glu Glu (SEQ ID NO:1);

His Lys Ser Ala Ile Val Thr Leu Thr Tyr Asp Ser Glu Trp Gln Arg Asp Gln Phe (SEQ ID NO:2);

Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn Asp Ser Ser Glu Glu Glu (SEQ ID NO:3);

Cys Asp Ser Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu Glu (SEQ ID NO:4);

Glu Lys Thr Gly Ile Leu Thr Val Thr Tyr His Ser Glu Thr Gln Arg Thr Lys Phe (SEQ ID NO:5).

3. A chemical composition according to claim 1 having at least one, but no more than six additional glycine residues at the carboxy terminus.

4. A chemical composition according to claim 2 having up to six additional amino acid residues at the carboxy terminus and those six residues are any combination of glycine and asparagine.

5. A chemical composition according to claim 2 having at least one, but no more than six additional asparagine residues at the carboxy terminus.

6. A chemical composition according to claim 2 wherein carboxymethylcysteine is substituted for cysteine.

7. A diagnostic method comprising the steps of:

reacting a sample of body fluid or tissue likely to contain antibodies with one or more peptides derived from the E2, E6, and E7 early coding regions of human papillomavirus 16 and 18;

b) forming a complex of said papillomavirus derived peptide and sample antibodies; wherein the formation of said antibody-peptide complex confirms the presence of antibodies to human papillomavirus; c) detecting said antibody-peptide complex.

8. A diagnostic method according to claim 7 wherein the one or more peptide sequences is selected from the group consisting of:

Asp Ile Cys Asn Thr Met His Tyr Thr Asn Trp Thr His Ile Tyr Ile
Cys Glu Glu (SEQ ID NO:1);
His Lys Ser Ala Ile Val Thr Leu Thr Tyr Asp Ser Glu Trp Gln Arg
Asp Gln Phe (SEQ ID NO:2);
Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu Thr Thr Asp
Leu Tyr Cys Tyr Glu Gln Leu Asn Asp Ser Ser Glu Glu Glu (SEQ ID NO:3);
Cys Asp Ser Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile
Arg Thr Leu Glu (SEQ ID NO:4);
Glu Lys Thr Gly Ile Leu Thr Val Thr Tyr His Ser Glu Thr Gln Arg
Thr Lys Phe (SEQ ID NO:5)

9. A diagnostic method according to claim 8 wherein carboxymethlycysteine is substituted for cysteine residues in said sequences.

10. A diagnostic method according to claim 8, wherein the diagnosis is made of an HPV infection.

11. A diagnostic method according to claim 8, wherein the diagnosis made is that of an HPV associated epithelial cell abnormality.

12. A diagnostic method according to claim 8, wherein the diagnosis made is that of cervical carcinoma.

13. A diagnostic method according to claim 8, wherein the diagnosis made is that of adenocarcinoma of the uterine cervix.

14. A diagnostic method according to claim 7, wherein the peptide employed is derived from an E2 coding region and the diagnosis made is that of infection with an oncogenic HPV.

15. A diagnostic method according to claim 7, wherein the peptide employed is derived from an E6 coding region and the diagnosis made is that of carcinoma.

16. A diagnostic method according to claim 7, wherein the peptide employed is derived from an E7 coding region and the diagnosis made is that of carcinoma.

17. A method according to claim 7, wherein the detection step is accomplished by means of visual inspection of a color change.

18. A method according to claim 7, wherein the detection step is accomplished by a spectrophometer.